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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,156	11/13/2001	Kelli H. Kennedy	10011462-1	5327

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

QIN, YIXING

ART UNIT	PAPER NUMBER
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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/054,156	Applicant(s) KENNEDY ET AL.	
	Examiner Yixing Qin	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,11-27 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,11-27 and 29-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of claims 30 and 35 as being not burdensome to examine in the reply filed on 1/24/08 is acknowledged. The traversal is on the ground(s) that the claims had been examined previously and would not be a great burden to examine and/or reconsider. Upon further consideration, it would seem that the claimed invention in claim 30 would be an obvious variation of the other independent claims. As previously mentioned, the difference is either an application or general printer driver launching a printing agent. However, one of ordinary skill should realize that either an application or a general printer driver is a program created from a set of instructions, and would have been obvious to put a calling function to launch a printing agent in either set of instructions. The applicant's specification has not pointed out any novel advantage to having either program launch the print driver, so the stance taken above is deemed to be a reasonable interpretation of the claims.

Response to Arguments

Applicant's arguments in the Appeal Brief filed 10/16/07 have been considered but are moot in view of the new ground(s) of rejection. The new rejection addresses the issue of whether a query is inherently made when identifying available printers. Instead of inherency, the stance that such a query is obvious and well known will be taken. Such querying of available printers on a network (commonly as known as polling) has been known in the printing art and would have been obvious for one of ordinary skill to

know how to query for available printers and use that technique in the Iwata invention.
A new reference, Neuhard et al (U.S. Patent No. 6,335,795), is used to show such a technique. Please see the rejection below for more details.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1, 2, 6-16, 18-27, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al (U.S. Pub No. 20020163665 A1) in view of Marbry et al (U.S. Patent No. 5,692,111) and further in view of Neuhard et al (U.S. Patent No. 6,335,795)

Regarding claims 1, 9, 15, and 23, Iwata discloses a method of determining information regarding at least one physical printer available to receive a print job from a client computer, comprising:

calling a general printer driver directly from an application executed by the client computer; (Fig 2, items 100, 110)

receiving an identification of the at least one available printer from the server;
(Fig. 5)

wherein the general printer driver is accessible as a destination printer in a print menu, and wherein the general printer driver is configured to launch a printing agent (Fig. 35) to initiate the transmitting when the general printer driver is selected as the destination printer. (Fig 5, item IC4 is discloses as the virtual printer driver in P[0153]).

It does not explicitly disclose “transmitting a query from the client computer to a server via a network for an identification of the at least one available physical printer;
selecting a single one of the identified physical printers to receive the print job;
after the selecting, downloading from the server a file used to convert print data into a format specific to the selected physical available printer;”

However, Neuhard discloses in Fig. 14a and column 13, line 58-column 14, line 9 that clients can query a server for available printers. Marbry discloses this in Fig. 3, and column 3, lines 44-65 the downloading of a file to convert data.

All references are combinable because they are in the art of printing to selected printers on a network

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the technique in Marbry for installing drivers for a single printer and the Neuhard technique for printer discovery.

The motivation would have been to allow users to find and to print to a single printer instead of a plurality of printers like in the Iwase reference.

Therefore, it would have been obvious to combine all references to obtain the invention as specified.

Regarding claims 2, 10, Iwata discloses further comprising:

launching a printing agent with the general printer driver, the printing agent generating the query transmitted from the client computer to the server for the identification. (Fig. 35, item id113)

Regarding claims 6, 20, 25, Iwata discloses wherein the identification of the at least one available printer received from the server is a list of printers. (Fig. 5)

Regarding claims 7, 13, 21, 26, Iwata discloses wherein the list of printers includes information from one or more of a physical location, a printer capability and a network address. (Figs. 31-34)

Regarding claims 8, 14, 22, 27 Iwata discloses further comprising displaying the identification of the at least one available printer for the user to select the selected one of the at least one available printer. (Figs. 31-34)

Regarding claim 16, Iwata discloses wherein the general printer driver code is called from the application in response to a print command entered by a user. (Fig. 2 items 100 and 110)

Regarding claim 31, Iwata discloses a method of determining information regarding at least one printer available to receive a print job from a client computer, comprising:

- providing a general printer driver on the client computer accessible as a destination printer in a print menu; (Fig. 2 and Fig 5, item IC4)

- selecting the general printer driver as the destination printer directly from an application executed by the client computer; (Fig. 5)

- responsive to the selecting, launching a printing agent on the client computer from the general printer driver; (Fig. 35)

- transmitting a query from the printing agent to a server via a network for an identification of the at least one available printer; (Fig. 35, item id113)

- receiving at the client computer an identification of the at least one available printer from the server in response to the query; (Fig. 35, item id 113)

- selecting, via the general printer driver, one of the at least one available printer to print the print job; and (Fig. 35, item id 113 and Fig. 5)

- downloading from the server to the client computer a file configured to convert the print job into a format specific to the selected printer; (Fig. 2, item 120 and P[0195].

Figs. 16 item S500 and P[315] discloses that the distributed printing utility does convert data to a specific format for a printer) and

printing the print job on the selected printer. (Fig. 2, item 60, 70, 80)

Regarding claim 32, Iwata discloses further comprising:

using the downloaded file, converting the print data into the format specific to the selected one of the at least one available printer; and

printing the converted print data on the selected one of the physical printer.

Regarding claims 33, 35, 36 Iwata discloses the method according to claim 1, wherein the transmitting is performed after the calling. (Figs. 21-24 – Fig. 20 shows the printer tab, and where one can see there are listed printers for printing. This occurs after an user has selected the distributed printing icon – IC4 of Fig.5) (i.e. general printer driver) and is setting which printers to print to.

Regarding claim 34, Iwata discloses the method according to claim 1, wherein the selecting is performed by a user. (Fig. 5 is common printing window, one knows the user clicks a printer to print to).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2625

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al (U.S. Pub No. 20020163665 A1) in view of Marbry et al (U.S. Patent No. 5,692,111) in view of Neuhard et al (U.S. Patent No. 6,335,795) and further in view of Official Notice.

Regarding claims 3, 17 Iwata discloses a print system with downloadable print drivers.

It does not explicitly disclose “wherein the general printer driver is a PostScript printer driver.”

However, the Examiner takes Official Notice that Postscript is well-known printing format.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a PostScript printing driver.

The motivation would have been to use a widely accepted format for compatibility reasons.

Therefore, it would have been obvious to use a PostScript driver in the Iwata invention to obtain the invention as specified.

III. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al (U.S. Pub No. 20020163665 A1) in view of Marbry et al (U.S. Patent No. 5,692,111) in view of Neuhard et al (U.S. Patent No. 6,335,795) and further in view of Gase et al (U.S. Patent No. 5,580,177).

Regarding claims 4, 11, 18, 24, Iwata discloses a distributed printing system with driver downloading features.

It does not explicitly disclose "wherein the downloaded file is a printer description file and the method further comprises overwriting a generic printer description file with the downloaded printer description file and converting application specific data to be printed to printer specific data using the downloaded printer description file."

However, Gase, discloses in column 4, lines 17-23 the ability to overwrite a printer driver with a newer one. One would understand that the new printer driver would be used to process/convert data to be printed. The printer driver would read on as a printer description file.

All references are combinable because both references are in the art of networked printing and providing drivers for printers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have an system for updating drivers.

The motivation would be to have the most current driver available for compatibility and efficiency reasons.

Therefore, it would have been obvious to combine all references to obtain the invention as specified.

Regarding claims 5, 12, 19, Iwata discloses a distributed printing system with driver downloading features.

It does not explicitly disclose “a distributed printing system with driver downloading features wherein the generic printer description file is temporarily overwritten until completion of the conversion.”

However, the use of the distributed printing utility 120 effectively acts in place of the virtual printer driver (shown in Fig. 4 of Iwata in detail) by processing and converting intermediate print data into final output print data for a particular printer. While there is no explicitly overwriting, the overwriting and restoring of older drivers has been known in the Windows XP operating system, where a built in feature to allow the rollback of an updated driver to an older one if the new one is deemed to be incompatible.

All references are combinable because both references are in the art of networked printing and providing drivers for printers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have an system for updating drivers.

The motivation would be to have the most current driver available for compatibility and efficiency reasons.

Therefore, it would have been obvious to combine all references to obtain the invention as specified.

IV. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al (U.S. Pub No. 20020163665 A1) in view of Neuhard et al (U.S. Patent No. 6,335,795)

30. (Previously presented) A method of determining information regarding at least one printer available to receive a print job from a client computer, comprising:

calling a general printer driver directly from an application executed by the client computer; (Fig 2, items 100, 110)

receiving an identification of the at least one available printer from the server; (Fig. 5)

downloading a file from the server used to convert print data into a format specific to a selected one of the at least one available printer; (Fig. 2, item 120 and P[0195]. Figs. 16 item S500 and P[315] discloses that the distributed printing utility does convert data to a specific format for a printer) and

wherein the general printer driver is accessible as a destination printer in a print menu., and wherein the application is configured to launch a printing agent to initiate the transmitting when the general printer driver is selected as the destination printer. (Fig 5, item IC4 is discloses as the virtual printer driver in P[0153])

It does not explicitly disclose “transmitting a query from the client computer to a server via a network for an identification of the at least one available printer; “

However, Neuhard discloses in Fig. 14a and column 13, line 58-column 14, line 9 that clients can query a server for available printers.

Iwata and Neuhard are combinable because both are in the art of finding printers to print

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have queried for available printers.

The motivation would have been to find which printers are ready to print or handle the capabilities of the job.

Therefore, it would have been obvious to combine Iwata and Neuhard to obtain the invention as specified.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YQ

/Mark K Zimmerman/
Supervisory Patent Examiner, Art Unit 2625